

| Ref # | Hits   | Search Query                                | DBs                            | Default Operator | Plurals | Time Stamp       |
|-------|--------|---|--------------------------------|------------------|---------|------------------|
| L1    | 28728  | SAM   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/18 14:46 |
| L2    | 2224   | self-assembled with monolayer               | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/18 14:46 |
| L3    | 29992  | 1 2   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/18 14:46 |
| L5    | 464212 | copper Cu                                   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/18 14:46 |
| L6    | 5187   | 5 and 3                                     | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | OFF     | 2005/07/18 14:46 |
| L7    | 2656   | 6 and (via damascene)                       | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/18 14:47 |
| L8    | 305    | 7 and ("438"/\$3 "257"/\$3).ccls.           | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/18 14:48 |
| L9    | 218    | 8 not sam.in.                               | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/18 14:48 |
| L10   | 4249   | ((438/627,643,687) or (257/751, 762)).CCLS. | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | OFF     | 2005/07/18 15:16 |
| S1    | 31     | (MIKAMI-NOBORU<br>MACHIDA-HIDEAKI).in.      | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | OFF     | 2005/07/15 14:43 |
| S2    | 0      | S1 and (copper cu) and lner                 | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | OFF     | 2005/07/15 14:43 |
| S3    | 0      | S1 and (copper cu) and liner                | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | OFF     | 2005/07/15 14:44 |
| S4    | 274054 | alkyl and (alkylene OR aromatic)            | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/15 14:44 |
| S5    | 464212 | copper Cu                                   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/18 14:46 |
| S6    | 102362 | liner                                       | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR               | ON      | 2005/07/15 14:44 |

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|-----|------|---|--------------------------------|----|-----|------------------|
| S7  | 2281 | S4 and S5 and S6  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | ON  | 2005/07/15 14:44 |
| S8  | 1217 | S7 and (via damascene)  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | ON  | 2005/07/18 14:47 |
| S9  | 56   | S8 and ("438"/\$3 "257"/\$3).ccs.   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | ON  | 2005/07/18 14:47 |
| S10 | 46   | S9 and @ad<"20021211"   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/18 10:22 |
| S11 | 130  | (fukuyama-shunichi<br>nakada-yoshihiro yamaguchi-jo<br>suzuki-katsumi).in.  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/15 15:08 |
| S12 | 4    | S11 and aryl  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/15 15:08 |
| S13 | 2867 | "aryl ether"  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/15 15:08 |
| S14 | 33   | S13 and "insulating film"   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/15 15:08 |
| S15 | 1    | ("6323131").PN.   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/15 15:15 |
| S16 | 2    | 1-dimethylphosphino-2-triethoxysilylethane<br>1-diethylphosphino-2-triethoxysilyl ethane<br>1-diphenylphosphino-2-triethoxysilylethane<br>1-dimethylphosphino-2-trimethoxysilyl ethane<br>1-diethylphosphino-2-trimethoxysilylethane<br>1-diphenylphosphino-2-trimethoxysilyl ethane<br>1-dimethylphosphino-3-triethoxysilylpropane<br>1-diethylphosphino-3-triethoxysilylpropane<br>1-diphenylphosphino-3-triethoxysilylpropane<br>1-diphenylphosphino-2-trichlorosilyl ethane<br>1-diphenylphosphino-2-trisdimethylaminosilyl ethane<br>1-diphenylphosphino-2-trisocyanatesilyl ethane<br>1-diphenylphosphino-4-triethoxysilyl ethylbenzene | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/18 09:13 |

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|-----|---|---|--------------------------------|----|-----|------------------|
| S17 | 2 | 1-dimethylphosphino-2-triethoxysilylethane<br>1-diethylphosphino-2-triethoxysilylethane<br>1-diphenylphosphino-2-triethoxysilylethane<br>1-dimethylphosphino-2-trimethoxysilylethane<br>1-diethylphosphino-2-trimethoxysilylethane<br>1-diphenylphosphino-2-trimethoxysilylethane<br>1-dimethylphosphino-3-triethoxysilylpropane<br>1-diethylphosphino-3-triethoxysilylpropane<br>1-diphenylphosphino-3-triethoxysilylpropane<br>1-diphenylphosphino-2-trichlorosilylethane<br>1-diphenylphosphino-2-trisdimethylaminosilylethane<br>1-diphenylphosphino-2-triisocyanatesilylethane<br>1-diphenylphosphino-4-triethoxysilylethylbenzene                           | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/18 09:14 |
| S18 | 2 | "1-dimethylphosphino-2-triethoxysilylethane"<br>"1-diethylphosphino-2-triethoxysilylethane"<br>"1-diphenylphosphino-2-triethoxysilylethane"<br>"1-dimethylphosphino-2-trimethoxysilylethane"<br>"1-diethylphosphino-2-trimethoxysilylethane"<br>"1-diphenylphosphino-2-trimethoxysilylethane"<br>"1-dimethylphosphino-3-triethoxysilylpropane"<br>"1-diethylphosphino-3-triethoxysilylpropane"<br>"1-diphenylphosphino-3-triethoxysilylpropane"<br>"1-diphenylphosphino-2-trichlorosilylethane"<br>"1-diphenylphosphino-2-trisdimethylaminosilylethane"<br>"1-diphenylphosphino-2-triisocyanatesilylethane"<br>"1-diphenylphosphino-4-triethoxysilylethylbenzene" | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/18 09:31 |
| S19 | 0 | ("2004/0137726"   "2004/0265600").URPN.   | USPAT                          | OR | OFF | 2005/07/18 09:16 |

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|-----|--------|--|--------------------------------|----|-----|------------------|
| S20 | 1      | ("20040092096").PN.  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/18 10:01 |
| S21 | 1      | ("6323131").PN.  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/18 10:01 |
| S22 | 14     | ("5508141"   "5677545"  <br>"5721056"   "5779818").PN. OR<br>("6323131").URPN. | US-PGPUB;<br>USPAT;<br>USOCR   | OR | OFF | 2005/07/18 10:01 |
| S23 | 4458   | organophosphorus   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/18 10:22 |
| S24 | 464212 | copper Cu  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | ON  | 2005/07/18 10:22 |
| S25 | 1477   | S23 and S24  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | ON  | 2005/07/18 10:22 |
| S26 | 182    | S25 and (liner barrier)  | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | ON  | 2005/07/18 10:24 |
| S27 | 149    | S26 and @ad<"20021211"   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/18 10:23 |
| S28 | 4      | S27 and ("438"/\$3 "257"/\$3).cccls.   | US-PGPUB;<br>USPAT;<br>IBM_TDB | OR | OFF | 2005/07/18 10:23 |